

Title: MODELING ACTIVE REGION EVOLUTION - A NEW LWS TR&T STRATEGIC CAPABILITY MODEL SUITE

AUTHOR: Peter MacNeice

Abstract:

In 2006 the LWS TR&T Program funded us to develop a strategic capability model of slowly evolving coronal active regions. In this poster we report on the overall design, and status of our new modeling suite. Our design features two coronal field models, a non-linear force free field model and a global 3D MHD code. The suite includes supporting tools and a user friendly GUI which will enable users to query the web for relevant magnetograms, download them, process them to synthesize a sequence of photospheric magnetograms and associated photospheric flow field which can then be applied to drive the coronal model inner boundary, run the coronal models and finally visualize the results.